Sara Candussio

PHD STUDENT IN NATURAL LANGUAGE PROCESSING

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Education

University of Trieste, AI Lab   *Trieste, Italy*
Doctorate (PhD) in Natural Language Processing   *November 2024 - Present*

- Reasoning using generative language models.
- Supervised by Luca Bortolussi (University of Trieste) and Gabriele Sarti (University of Groningen, Center for Language and Cognition).
- Co-instructor of the Probabilistic Machine Learning MSc course and co-supervisor of MSc thesis projects.

University of Trieste & International School for Advanced Studies (SISSA)   *Trieste, Italy*
Master's of Science (MSc) in Data Science and Scientific Computing   *October 2022 - September 2024*

- Data Science and Artificial Intelligence track, all courses taught and assessed in English. Graduation score: 110 Cum Laude.
- Thesis: A Dialectic Pipeline for Improving LLM Robustness. Supervisors: Luca Bortolussi, Gabriele Sarti.

University of Trieste   *Trieste, Italy*
Bachelor's Degree (BSc) in Statistics and Computer Science for Business, Finance and Insurance   *September 2019 - September 2022*

- All courses taught and assessed in Italian. Graduation score: 110 Cum Laude.
- Thesis: Beta-binomial regression model for inferring the number of BSc graduate students in Italian universities. Supervisor: Francesco Pauli

Work Experience

Rachael S.r.l.   *Trieste, Italy*
Research Scientist   *October 2023 - March 2024*

- Sentiment analysis and topic modeling on web-scraped opinions.
- Question Answering on PDF documents using RAG and OCR techniques.
- Synthetic tabular data generation using past polls data.

University of Trieste   *Trieste, Italy*
Probabilistic Machine Learning MSc course teaching assistant   *March 2025 - Present*

- Review lectures and pratical lab sessions in Python. Course topics: ERM, PAC learnability, Probabilistic Graphical Models, Hidden Markov Models, Bayesian Classification and Regression, Sampling-based Inference, Expectation-Maximization algorithm, Variational Inference, Generative Modeling (VAEs, Diffusion Models), Gaussian Processes.

University of Trieste   *Trieste, Italy*
Communication and media manager tutor for the PhD, MSc and BSc activities   *March 2025 - Present*

- Help in spreading information regarding seminars, interships, workshops, social events across the different courses of the informatics section of University of Trieste.

University of Trieste   *Trieste, Italy*
Orientation tutor for incoming MSc students   *May 2023 - December 2023*

- Helpdesk for non-EU and EU students regarding admission and enrolling procedures.

Extracurricular Activity

SOCIAL ENGAGEMENTS

2024-Present	VicePresident, 🔗 AI Student Society (AI2S)
2023-Present	Board member, 🔗 AI Student Society (AI2S)
2021-2024	Board member and Founder, 🔗 Lista AutonomaMente (LAM) APS
2023-Present	Department Representative, Matemathics, Informatics, Geosciences (MIGe)
2021-2023	Department Representative, Economics and Statistics (DEAMS)

Honors & Awards

2019-2022	Merit scholarship, Generali4Girls in STEM	*Trieste (IT)*
2024	3rd place winner, "ACCELERATE AI" hackaton (AINDO)	*Trieste (IT)*